

EPBD revision: How to boost renovation rates and depth in the EU

Renovate Europe recommendations for the EPBD review

Final

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Summary

The revision of the EPBD is a necessary pre-condition to meet the Renovation Wave objectives and to achieve a highly energy efficient and decarbonised building stock by 2050. The stubbornly low energy renovation rate and depth across the EU clearly calls for the need to strengthen the provisions of the EPBD.

Renovate Europe is convinced that the following four regulatory measures must be introduced as they will be crucial in boosting renovation rates and depth in the EU:

- 1) ***Introduction of Minimum Energy Performance Standards (MEPS) for all renovations***
- 2) ***Updating and improving the Energy Performance Certificate (EPC) Framework***
- 3) ***Strengthening the requirements of the Long-Term Renovation Strategies (LTRS)***
- 4) ***Setting an ambitious definition of an EU Deep Renovation Standard***

In addition, Renovate Europe highlights the importance of the following four non-regulatory measures that will be essential to provide the needed enabling framework for a strengthened EPBD to be rolled out successfully:

- 1) ***Boosting Technical Assistance***
- 2) ***Significantly Increased Financing***
- 3) ***Supply Chain Capacity***
- 4) ***Innovation***

Introduction

The revision of the Energy Performance of Buildings Directive (EPBD) is a pre-condition to meet the objectives set out in the Renovation Wave Strategy to **boost the rate and depth of energy renovations across the EU**. The EPBD revision will also be instrumental in achieving a future-proof, healthy, highly energy efficient and decarbonised building stock in the EU by 2050.

Focusing on the reduction of the energy consumption of the existing building stock with holistic renovations that capture the full energy performance improvement potential, in line with the Energy Efficiency First Principle, deliver quality, healthy buildings, is crucial to attaining the EU objectives for climate neutrality by 2050. Reducing the energy consumption of the EU building stock generates multiple benefits for citizens through improved health, reduced energy poverty and better quality of life, in addition to the undeniable contribution of energy renovations to the economy through local job creation.

The stubbornly low renovation rates and depth across the EU to date gives strong impetus to the need to strengthen the European regulatory and non-regulatory measures for energy renovations in the EPBD. Renovate Europe is convinced that the following four elements (foreseen in the revision of the EPBD) will be crucial to boosting the renovation rates and depth in the EU:

I. Regulatory Measures to strengthen the EPBD

1) ***Introduction of Minimum Energy Performance Standards (MEPS) for all renovations***

Renovate Europe strongly believes that MEPS must be a central part of the EPBD revision. If well-designed, properly signalled, and fully embedded in a balanced and harmonised framework of financial and technical support, MEPS will bring about the step-change in the energy renovation rates and depth across the EU so desperately needed to address the climate emergency.

The EPBD currently only requires that a certain level of performance be met when a (major) renovation is being undertaken, but it does not contain any regulatory requirements to trigger a decision to renovate. As a result, the current provisions did not have a transformative impact on the buildings sector. The planned review of the EPBD in 2021 is the moment to introduce a mandatory MEPS framework for all renovations, requiring all Member States to establish national MEPS schemes that underpin the opportunity to transform their buildings in a short timeframe.

MEPS are segment-based regulations introduced at national or regional level which set a future date to achieve a set performance level. They are the most effective means of making measurable progress, and several examples of the use of MEPS in Member States have proven successful so far¹.

Renovate Europe recommends that MEPS be included in the revised EPBD and be applied to all buildings undergoing renovations, taking account of the following elements:

- **Market Predictability:** MEPS are a means of providing progressive policy signals and thereby ensuring market predictability for all involved actors, including owners. They can also guide decisions on how the workforce needs to be upskilled. Industry, planners, builders, and installers will benefit from a long-term predictable perspective for their projects and for capacity-building. MEPS are also relevant for the financial sector as it can anticipate their deployment with new financial products.
- **Flexibility on where to start for each MS:** Having scrutinised each segment in their building stock, Member States will be equipped with the necessary knowledge to make an informed decision about which segment to choose to start with for the introduction of MEPS. They will also be able to discern how the requirements can be extended, in a timely manner, to all building segments. Scrutiny of each building segment should include an assessment of the energy savings potential, expected carbon performance as well as the critical multiple benefits that would be delivered. Deciding to tackle the 'worst-performing buildings' for example will not only achieve significant energy savings but will also lead in most cases to addressing vulnerable consumers suffering from energy poverty.
- **Rapid increase in ambition to reflect climate emergency:** MEPS provide MS with the ability to decide on which building segment to address first, the metric to be used and the timeframe for action for each building segment depending on their specific national characteristics. The ambition of each of these three elements should be designed to increase rapidly and expand to the whole building stock, thus supporting the transformation of the stock towards NZEB or equivalent levels of performance in line with the EU 2030 and 2050 climate goals, whilst also allowing for the needed phase-in periods for market and societal alignment.
- **Financial and technical support:** MEPS must be accompanied by financial and technical support measures deployed at national and/or regional level to ensure the affordability of housing, especially for vulnerable groups.
- **Improved enforcement and data collection through EPCs:** Evaluating and enforcing MEPS against set benchmarks will also be crucial. Without a functioning and effective verification and enforcement scheme for MS to check whether MEPS targets are being met, MEPS will not succeed in delivering on their potential. Linking MEPS to a revised and reinforced EPC framework could be an effective means for Member States to monitor progress at individual building and building stock levels.
- **Synergy with Article 5 of the EED:** Public bodies should lead by example and become front runners in the challenge of transforming the EU building stock. Introducing more stringent MEPS for public buildings should be envisaged, in line with reinforced requirements expected under Article 5 of the EED.
- **Integration with long-term renovation strategies (LTRS):** MEPS should be designed as an integral element in the LTRS that are required under Article 2a of the EPBD, to provide certainty on how to achieve the stated 2030 and 2050 goals. However, the deployment of MEPS should not wait for the publication of the next version of the LTRS and must be accelerated to respond to the climate emergency.

¹ RAP Report (2020): [Case studies: Minimum energy performance standards for European buildings | Regulatory Assistance Project \(raponline.org\)](https://raponline.org)

2) *Updating and improving of the Energy Performance Certification (EPC) Framework*

EPCs were originally conceived as a market instrument to influence the purchase and leasing decisions of building owners and occupiers and have become an extremely useful tool for actors across the value chain, including the financial sector. Well designed and implemented EPC schemes are also instrumental in gathering energy performance and other data on the existing building stock. However, the current EPC framework, set up to give maximum flexibility to Member States, has resulted in a huge diversity in the national methodologies used, in how the gathered information is presented and in the cost to building owners across the 27 Member States.

Renovate Europe recommends that the EPC framework be strengthened as part of the EPBD revision, taking the following elements into account:

- **Greater convergence** in the national methodologies will lead to the emergence of a more transparent, comparable, and reliable EPC framework. This will significantly boost the role and potential of EPCs not only as an information tool for building occupiers, but also as an instrument to link preferential financing conditions to quality renovations.
- **Increase quantity of EPCs:** The EPC framework is the best methodology for gaining the most accurate overview of the building stock. EPCs should be mandated after every renovation, with the aim of having an EPC for every building by 2030. Storing EPCs in a mandatory national EPC database will be key to tracking progress towards our medium and long-term goals.
- **Increase the quality of EPCs:** The EPBD should be revised to ensure that the preparation of an EPC is always based on a physical visit to the relevant building, that they include actionable, tailored recommendations for the improvement of the energy performance of the building and are prepared at reasonable cost to the building owner. In addition, the certifiers should be held liable for the veracity and pertinence of the information provided on the EPC. Without reliable, actionable recommendations based on a first-hand knowledge of the relevant building, the impact of EPCs on the quality of renovation works will remain minimal.
- **Storing EPCs in national digital database:** EPCs should become a more dynamic tool and the data collected should be reliable and accessible to a wide range of different and pertinent stakeholders in the energy renovation value chain. To achieve this, digitalising EPCs and storing the information gathered in mandatory national EPC databases will be crucial. The EPC databases will better inform national, regional and local authorities in planning renovation strategies, on verifying if the building-segment targets are being met in the context of MEPS, and on developing the needed social support schemes for vulnerable households suffering from energy poverty. The data collected should also be accessible to a range of actors in the construction value chain, for the purposes of performance calculations, gathering information before and after works and reinforcing the accuracy of monitoring and evaluation in the market.
- **Financing sector:** Increasing the quantity of reliable data is also essential in better engaging the financial sector in the renovation field, as improving the availability of such data will lead to a better risk-rating and more standardised solutions that can be deployed for renovation schemes.
- **Accreditation systems and quality control:** Reliable accreditation systems for qualified professionals will be essential in improving the quality and reliability of the EPCs delivered by certifiers. For this, a training scheme for certifiers to attest to their competencies and help keep them up to date with developing technologies in the building sector is key. Such a training scheme would also be the opportunity to boost the green workforce and attract some of the unemployed from hard-hit sectors post-COVID towards the building sector. Introducing better quality control mechanisms for EPCs should also lead to more reliable data being gathered.
- **Include multiple benefits:** Highlighting the non-energy benefits related to health, productivity and the economy will further amplify the attractiveness of undertaking renovation works and better motivate building owners to act.
- **Interlinkage with Building Renovation Passports:** Advice given in EPCs relating to prioritised renovation works to be carried out, must be presented as a full renovation pathway for each building to achieve its full energy performance potential well before the 2050 deadline for the transformation of the building stock in the EU to a highly energy efficient and decarbonised stock. The EPC recommendations will be directly linked

to the more complete Building Renovation Passport which further describes tailor-made measures to implement a holistic renovation and deliver related benefits for occupants. Having a full roadmap to 2050 for each building will be critical to support quality, phased renovation works when needed and which do not lock in future energy savings.

- **Link with Digital Building Logbooks:** Ensuring that EPCs and Building Renovation Passports become the 'energy' module of Digital Building Logbooks will allow all relevant actors in the construction value chain to have easy but secure access to the building's information online. This will better inform all decisions related to the same building and will take account of the increased digitalisation of the construction sector.

3) *Strengthening the requirements of the Long-term Renovation Strategies (LTRS)*

The LTRS must become more than a well-conceived plan of action. They must be an effective roadmap that Member States use to guide their policy, financial and technical approaches to the societal challenge of transforming our building stock to be highly energy efficient and decarbonised by 2050.

Renovate Europe recommends that the LTRS are strengthened in the EPBD taking the following elements into account:

- **Update milestones:** Recent assessment of the Long-term Renovation Strategies revealed their non-compliance with the EPBD objectives of climate-neutrality by 2050². There is a need to revise the existing LTRS and increase their ambition in line with the EU's *Fit-for-55* 2030 obligations, 2050 climate neutrality goals and to keep pace with technological progress. The milestones included must be robust and enforceable, in line with the MEPS for each country to ensure a clear trajectory for all buildings. The 2030 milestone should describe the contribution of buildings in delivering the 2030 and 2050 climate targets and be reflected in the national energy and climate plans that are periodically submitted by Member States to the European Commission.
- **Outline specific support:** The LTRS should be more specific on how to achieve the long-term goals set out, including how to scale up technical assistance and project development support in each Member State, and for each actor in the value chain.
- **Include multiple benefits:** Taking better account of the non-energy benefits related to health, productivity and the economy will inform strategic planning and increase the attractiveness of implementing energy renovation works via programmes and schemes proposed by the LTRS.
- **Better monitoring:** Stronger oversight and monitoring of the implementation of LTRS in each Member State is also needed, to better ensure real action on the ground.

4) *Ambitious definition of the Deep Renovation Standard*

Deep renovations are crucial to avoiding lock-in effects, and to deliver on all the multiple benefits for citizens, for businesses and for the environment. Having a "Deep Renovation" standard in place should lead to a more uniform approach by the Member States to their renovation strategies and would be a welcome addition to the EU legislative framework on buildings. In addition, there is a strong need to mainstream deep renovation as it is only a marginal activity in today's market, touching just under 0.2% of buildings³ each year.

Renovate Europe suggests considering the following elements when defining 'deep renovation':

- **In line with the Renovation Wave Strategy** which emphasises the importance of undertaking deep renovations "reducing energy consumption by at least 60%"⁴. Renovate Europe sees this as a starting point for defining deep renovation, but this 60% should be expressed in terms of reduction in "energy needs".
- **Energy needs:** In developing a deep renovation standard, referring to a reduction in the "energy needs" will be in line with the EPBD methodology and standards used to support the Directive. Indeed, in the current

² BPIE Report on LTRSs (2021): <https://www.bpie.eu/publication/on-the-way-to-a-climate-neutral-europe-contributions-from-the-building-sector-to-a-strengthened-2030-target/>

³ See report entitled "Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU" for the European Commission, accessible here: https://ec.europa.eu/energy/sites/ener/files/documents/1.final_report.pdf

⁴ See here the Renovation Wave Strategy: [Renovation Wave Communication \(europa.eu\)](https://ec.europa.eu/energy/sites/ener/files/documents/1.final_report.pdf)

EPBD⁵, Member States are asked to calculate the energy needs to optimise health, indoor air quality and comfort levels in buildings⁶.

- **Holistic set of measures:** Renovate Europe focusses on the energy component of the deep renovation standard, to provide the optimum and most cost-effective renovation to help each building meet an NZEB or equivalent climate-neutral compatible level of performance but also recognises the importance of delivering on all benefits of renovation and thus combining multiple measures in each deep renovation projects. Therefore the standard should also take into account the health impacts of renovation works, by requiring the delivery of a high indoor environmental quality in conjunction with dramatically improved energy performance.
- **Diversity of buildings:** It is important when discussing deep renovation to consider the starting point of each building as well as its technical and economic potential. Indeed, some buildings are less suitable for deep energy renovation, whilst others can be renovated to become energy positive buildings.
- **Different starting points:**
 - o We note that in the case of **worst-performing buildings** (typically 'F', 'G', or 'H' rated) realising 60% improvement would not necessarily capture all the potential (e.g. a building consuming over 500 kWh/m²/year would "only" reach 200 kWh/m²/year, which would require another set of interventions to be "2050 proofed").
 - o Reducing the energy need of buildings which have an **intermediate level** of performance (for example a 'C' rated building consuming 150kWh/m²/year) will still be necessary to bring it in line with the 2050 climate goals but will need to take account of the different starting point.
 - o A suggestion for a deep renovation standard could therefore be a renovation that either reduces energy needs by at least 60% after the works **or** results in an energy need of 80kWh/m²/year, whichever delivers the lower energy demand.
- **Alignment with sustainable investment:** Setting the deep renovation standard as part of the EPBD revision will help guide sustainable investment, as discussed in the EU Taxonomy on Sustainable Financing. Defining a 'deep renovation' standard enshrining the Energy Efficiency First principle in the EU Taxonomy is important to avoid stranded assets and ensure the building stock contributes adequately to the EU's long-term climate goals.

II. Enabling framework to accompany the EPBD

In addition to the four regulatory elements outlined above, Renovate Europe highlights the **fundamental importance** of the four following non-regulatory measures that will be essential to drive up the rate and depth of energy renovations in the EU and to provide the needed enabling framework for a strengthened EPBD to be rolled out successfully.

The Renovation Wave Strategy embeds the three elements of Technical Assistance, Financing and Workforce Capacity, and the revision of the EPBD must be planned in conjunction with these crucial support mechanisms, alongside sustained innovation in the building sector, particularly for energy renovation works.

1) **Boosting Technical Assistance**

Technical assistance facilities to support the development of building renovation projects, for example One-Stop-Shops are an essential part of the enabling framework that must be introduced to accompany the EPBD in general, and the roll-out of MEPS in particular. Indeed, technical support will be key in driving energy renovations and in ensuring social protection for the vulnerable.

2) **Significantly Increased Financing**

In the field of financing to support the upscaling of energy renovation, there is no one-size-fits all and it will be necessary to mobilise financing from all sources, both public and private. The use of public grants should be

⁵ See EPBD Annex I on the Calculation of Energy Performance of Buildings

⁶ More information on the term 'energy need' on p4 of this document: [additional eceee EPBD comments - memo 15-12-02 FINAL](#)

prioritised to addressing low-income households or stimulating the market to go further. For this purpose, the Renovate Europe Campaign believes that a dedicated Energy Renovation Fund should be established.

The use of loans and other financial instruments will lead to a more efficient use of public funds and will help to leverage private investment without distorting the market. The REC calls for the establishment of an *EU Energy Renovation Fund* under Article 10 of the EPBD, which can be used by Member States to draw down funds to fully subsidise the energy renovation of buildings occupied by low-income and energy poor households. Rules about the management of the Fund will have to be negotiated, but as Member States will receive higher inflows of tax revenue and increased revenues from a revised ETS, the Fund can become a revolving fund by requiring Member States to repay amounts drawn down after a set period of, say, seven or ten years.

In the private housing market in the EU, there are around 50 million mortgaged homes, and these homes represent a significant proportion of the target base in the category of those that can pay for energy renovations. These markets can be unlocked through the greater involvement of retail banks in working with their clients to renovate their homes in the EU. The Commission should further support the development of green mortgages and ensure that their ambition is aligned with our buildings 2030 and 2050 trajectories. This could include developing a mortgage portfolio standard (MPS) for retail banks which could be included in a revised Article 10. It would require retail banks to improve the overall energy performance of the assets held within their property portfolios. More generally, mortgage advisors should acquire the needed skills to advise buyers on the opportunities and benefits of green mortgages, as this would fast-track decisions by new owners to undertake energy renovation works.

3) *Supply Chain Capacity*

The availability of adequate workforce capacity to undertake the needed renovations must not be overlooked. Member States must upskill their existing workforce, also taking account of the current digitalisation of the construction sector, to meet the demands of the Renovation Wave on the ground. Reliable accreditation systems for qualified professionals will also be essential in improving the quality and reliability of Energy Performance Certificates, as mentioned above.

Given the gaps in “coordinating skills” in all markets, special attention needs to be paid to supporting the emergence of the “renovation coordinators” role, in the form of one stop shops or other formats, to cover the technical, financial, and administrative steps needed in a holistic renovation project.

4) *Innovation*

The availability of emerging technologies facilitating rapid energy renovation works must be assured. Across the EU there have been multiple, successful pilot projects that demonstrate that new ways of undertaking energy renovations are possible and can be upscaled. The exploitation of the existing bank of accrued knowledge must be encouraged and facilitated by the European Commission for the benefit of market actors. One outstanding example is the marriage of digitalisation and the pre-fabrication of whole building elements in the *Energiesprong* approach in The Netherlands. Another noteworthy example of the use of digital technologies is the IMOPE URBS⁷ approach that assists policymakers in updating long-term renovation strategies and supports local planning for renovation schemes.

In conclusion, Renovate Europe suggests that these regulatory and non-regulatory measures must be strengthened and synchronised in the most effective way in the context of the upcoming revision of the EPBD to boost the rate and depth of renovation across the EU.

ENDS

⁷ See <http://www.imope.fr/> (in French)

About the Renovate Europe Campaign:

Renovate Europe is a political communications campaign with the ambition to reduce the energy demand of the EU building stock by 80% by 2050 through legislation and ambitious renovation programmes. Accelerating the rate of renovation is a key tool in the fight against climate change, and will deliver major benefits for people, their quality of life, and the economy. www.renovate-europe.eu

- #PrioritisePeople
- #AccelerateRenovation
- #Renovate2Recover

REC Partners (July 2021)

There are currently 48 partner companies and associations actively engaged in the work of the REC, of which 18 are National Partners active in the Member States:

